REMARKS

Claims 1-70 are pending in the application.

Claims 1-70 have been rejected.

Claims 1, 3, 8, 13, 24, 34, 37-39, 43, 45, 49-50, 57, 59 and 64 have been amended. No new matter has been entered. Support for the claim amendments can be found at least in ¶¶ [0093] and [0095]-[0098].

Claims 2, 35, 44 and 58 have been cancelled.

Rejection of Claims under 35 U.S.C. § 103(a)

Claims 1-5, 34, 36, 43-47 and 57-61 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gleeson et al. (USPN 5,959,989) ("Gleeson") in view of Shinomiya (USPPN 2003/0037165) ("Shinomiya"). Office Action, p. 3. Applicants respectfully traverse this rejection.

Claim 1, as amended, now recites:

> 1. A method comprising:
> receiving a packet, the packet comprising a multicast destination address; and
> sending a copy of the packet to a virtual network device sub-unit via a virtual network device link, wherein
> the virtual network device link couples two virtual network device sub-units, and wherein the two virtual network device sub-units are configured to operate as a single virtual network device, and
> the sending comprises sending at most one copy of the packet via the virtual network device link.

As amended, Claim 1 now incorporates the elements of previously presented Claim 2. Applicants respectfully submit that Gleeson and Shinomiya, alone or in combination, fail to show, teach, or even suggest that the sending comprises sending at most one copy of the packet via the virtual network device link.

In rejecting Claim 2, the Office Action attempts to equate Gleeson's multicast network device (MND) selecting at most one copy of a message to forward with the claimed "sending at most one copy of the packet via the virtual network device link." *See* Office Action, p. 4. However, Gleeson fails to show, teach, or even suggest that the at most one copy of a packet is sent via a virtual network device link. Instead, the cited sections of Gleeson simply disclose forwarding at most one copy of a message. *See* Gleeson, 15:6-14. Hence, Gleeson fails to show, teach, or even suggest sending at most one copy of the packet via the virtual network device link.

Furthermore, Shinomiya also fails to show, teach, or even suggest sending at most one copy of the packet via the virtual network device link. Instead, the cited sections of Shinomiya simply disclose a Virtual Router Redundant Protocol function. *See* Shinomiya, ¶ [0043]. Therefore, Shinomiya also fails to show, teach, or even suggest sending at most one copy of the packet via the virtual network device link.

For at least these reasons, Applicants respectfully submit the reconsideration and withdrawal of the rejection to Claim 1.

Claim 34, as amended, now recites:

34. A system comprising:
an interface to a virtual network device link, wherein
the interface is configured to receive a packet,
the virtual network device link couples two virtual network device sub-units, and
the two virtual network device sub-units are configured to operate as a single virtual network device; and
a distributed forwarding module coupled to the interface, wherein
the distributed forwarding module is configured to forward the packet,
the distributed forwarding module is configured to perform an ingress lookup for the packet if the packet includes a multicast destination address, and

> the distributed forwarding module is configured to perform an egress lookup for the packet if the packet includes a unicast destination address.

As amended, Claim 34 now incorporates the elements of previously presented Claim 35. Applicants respectfully submit that Gleeson, Shinomiya, Kalkunte, and Gallo, alone or in combination, fail to show, teach, or even suggest a distributed forwarding module that is configured to perform an ingress lookup for the packet if the packet includes a multicast destination address and a distributed forwarding module that is configured to perform an egress lookup for the packet if the packet includes a unicast destination address.

In rejecting Claim 35, the Office Action attempts to equate Kalkunte's receipt of a unicast frame by a fabric ingress and forwarding to an egress port in a fabric with the claimed distributed forwarding module configured to perform an egress lookup for the packet if the packet includes a unicast address. *See* Office Action, p. 30. In addition, the Office Action also attempts to equate Gallo's passing of a multicast frame to a layer ingress processor with the claimed distributed forwarding module configured to perform an ingress lookup for the packet if the packet includes a multicast address. *Id.*, pp. 30-31. However, Kalkunte and Gallo both fail to show, teach, or even suggest that a distributed forwarding module is configured to perform an ingress lookup or an egress lookup. The cited sections of Kalkunte disclose forwarding a unicast packet to the egress port, but not any type of egress lookup. *See* Kalkunte, ¶ [0037]. Likewise, the cited sections of Gallo disclose passing a multicast frame to an ingress processor, but not any type of ingress lookup. *See* Gallo, 3:47-59. Hence, Kalkunte and Gallo, alone or in combination, fail to show, teach, or even suggest a distributed forwarding module that is configured to perform an ingress lookup for the packet if the packet includes a multicast destination

address, and a distributed forwarding module that is configured to perform an egress lookup for the packet if the packet includes a unicast destination address.

Moreover, Gleeson and Shinomiya, alone or in combination, also fail to show, teach or even suggest a distributed forwarding module that is configured to perform an ingress lookup for the packet if the packet includes a multicast destination address, and a distributed forwarding module that is configured to perform an egress lookup for the packet if the packet includes a unicast destination address. The cited sections of Gleeson disclose that a multicast controller of multicast network devices is configured to distribute messages and thus generates a list of VLAN designations on which a message is to be transmitted. *See* Gleeson, 13:39-48. The cited sections of Shinomiya disclose a Virtual Router Redundant Protocol function. *See* Shinomiya, ¶ [0043]. Thus, the cited sections of Gleeson and Shinomiya, alone or in combination, fail to show, teach, or even suggest a distributed forwarding module that is configured to perform an ingress lookup for the packet if the packet includes a multicast destination address, and a distributed forwarding module that is configured to perform an egress lookup for the packet if the packet includes a unicast destination address.

For at least these reasons, Applicants respectfully submit the reconsideration and withdrawal of the rejection to Claim 34.

With regards to Claims 43 and 57, Applicants respectfully submit that these Claims contain elements that are similar to those of Claim 1. As described above, Claim 1 is allowable over the §103 rejection. For at least this reason, Applicants respectfully request the reconsideration and withdrawal of the rejection to Claims.

With regards to Claims 3-5, 36, 45-47, and 59-61, Applicants respectfully submit that Claims 3-5, 36, 45-47, and 59-61 are dependent upon allowable base Claims 1, 34, 43, and 57, as described above. For at least this reason, Applicants respectfully request the reconsideration and withdrawal of the rejection to these claims.

Claims 13-17, 50-54 and 64-68 stand rejected under 35 U.S.C. §103(a) as being anticipated by Kalkunte et al. (USPPN 2003/0198231) ("Kalkunte") in view of Shinomiya. Office Action, p. 11. Applicants respectfully traverse this rejection.

Claim 13, as amended, is representative of amended independent Claims 50 and 64, and now recites:

> 13. A method, comprising:
> receiving a packet via a virtual network device link, the packet comprising a unicast destination address, wherein
> the virtual network device link couples two virtual network device sub-units, and wherein the two virtual network device sub-units are configured to operate as a single virtual network device; and
> performing an egress lookup for the packet in response to the receiving the packet, wherein
> the performing the egress lookup comprises allocating a non-primary entry corresponding to a source address of the packet in the lookup table.

Support for this feature can be found in the specification, at least, in p. 26, ¶¶ [0093], [0095]-[0098].

Applicants respectfully submit that Kalkunte and Shinomiya, alone or in combination, fail to teach or suggest "performing the egress lookup comprises allocating a non-primary entry corresponding to a source address of the packet in the lookup table." The cited sections of Kalkunte disclose a unicast frame that is received by a fabric ingress, which is then forwarded to an egress port in the fabric. *See* Kalkunte, ¶ [0037]. The cited sections of Shinomiya disclose a Virtual Router Redundant Protocol function.

See Shinomiya, ¶ [0043]. However, nothing in Kalkunte or Shinomiya disclose performing an egress lookup or that performing an egress lookup comprises allocating a non-primary entry corresponding to a source address in the lookup table. Hence, the cited sections of Kalkunte and Shinomiya, alone or in combination, fail to show, teach, or even suggest that performing the egress lookup comprises allocating a non-primary entry corresponding to a source address of the packet in the lookup table. For at least these reasons, Applicants respectfully submit the reconsideration and withdrawal of this rejection.

With regards to Claims 14-17, 51-54, and 65-68, Applicants respectfully submit that these claims are dependent upon allowable base Claims 13, 50, and 64, as described above. For at least this reason, Applicants respectfully request the reconsideration and withdrawal of the rejection to these claims.

Claims 6-7, 48 and 62 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gleeson in view of Shinomiya and further in view of Ellis et al. (USPPN 2002/0126671) ("Ellis"). Office Action, p. 19. Applicants respectfully traverse this rejection.

Claims 8-12, 40-42, 49 and 63 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gleeson in view of Shinomiya and further in view of Kalkunte. Office Action, p. 23.

Claims 35, 37, and 39 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gleeson in view of Shinomiya and further in view of Kalkunte and further in view of Gallo et al. (USPN 6,760,776) ("Gallo"). Office Action, p. 29. Applicants respectfully traverse this rejection.

Claim 38 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Gleeson in view of Shinomiya, further in view of Kalkunte, further in view of Gallo and further in view of Ellis. Office Action, p. 32. Applicants respectfully traverse this rejection.

Claims 18, 55 and 69 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kalkunte in view of Shinomiya and further in view of Ellis. Office Action, p. 33. Applicants respectfully traverse this rejection.

Claims 19-22, 56 and 70 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kalkunte in view of Shinomiya and further in view of Gleeson. Office Action, p. 34. Applicants respectfully traverse this rejection.

Claim 23 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Kalkunte in view of Shinomiya further in view of Gleeson and further in view of Ellis. Office Action, p. 38. Applicants respectfully traverse this rejection.

For at least the reason that Claims 6-7, 8-12, 18-23, 37-42, 48-49, 55-56, 62-63 and 69-70 are dependent upon allowable base Claims 1, 13, 34, 43, 50, 57 and 64, as described above, Applicants respectfully request the reconsideration and withdrawal of the rejection of these claims.

Claims 24 and 30-32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kalkunte in view of Gallo. Office Action, p. 39. Applicants respectfully traverse this rejection.

Claim 24, as amended, now recites:

24. A method comprising:
receiving a packet via a virtual network device link;
performing one of an ingress lookup and an egress lookup for the packet, wherein
the ingress lookup is performed for the packet if the packet includes a multicast destination address;
the egress lookup is performed for the packet if the packet includes a unicast destination address, wherein
the performing the egress lookup comprises allocating a non-primary entry corresponding to a source address of the packet in the lookup table; and
a primary lookup table entry can be allocated in response to an ingress lookup but not in response to an egress lookup.

Support for this feature can be found in the specification, at least, in p. 26, ¶¶ [0093], [0095]-[0098].

Applicants respectfully submit that Kalkunte and Gallo, alone or in combination, fail to teach or suggest "performing the egress lookup comprises allocating a non-primary entry corresponding to a source address of the packet in the lookup table." The cited sections of Kalkunte disclose a unicast frame that is received by a fabric ingress, which is then forwarded to an egress port in the fabric. *See* Kalkunte, ¶ [0037]. The cited sections of Gallo disclose a frame processing flow including VLAN processing, input media control filtering, a destination address lookup, a Layer 3 ingress processing, and Layer 4 processing. *See* Gallo, 3:47-63. However, nothing in Kalkunte or Gallo disclose performing an egress lookup that comprises allocating a non-primary entry corresponding to a source address in the lookup table. Thus, the cited sections of Kalkunte and Gallo, alone or in combination, fail to show, teach, or even suggest that performing the egress lookup comprises allocating a non-primary entry corresponding to a source address of the packet in the lookup table. For at least these reasons Applicants respectfully submit the reconsideration and withdrawal of this rejection.

With regards to Claims 30-32, Applicants respectfully submit that at least for at least the reason that Claims 30-32 are dependent upon allowable base Claims 24, the rejection to these claims should be reconsidered and withdrawn.

Claims 25, 26 and 28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kalkunte in view of Gallo and further in view of Gleeson. Office Action, p. 42. Applicants respectfully traverse this rejection.

Claim 33 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Kalkunte in view of Gallo and further in view of Ellis. Office Action, p. 45. Applicants respectfully traverse this rejection.

For at least the reason that Claims 25, 26, 28 and 35 are dependent upon allowable base Claim 24, Applicants respectfully request the reconsideration and withdrawal of the rejection of these claims.

CONCLUSION

In view of the amendments and remarks set forth herein, the application and the claims therein are believed to be in condition for allowance without any further examination and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5092.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicants hereby petition for such extensions. Applicants also hereby authorize that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to deposit account 502306.

Respectfully submitted,

/ Ana G. Luther/

Ana G. Luther
Patent Agent for Applicants
Reg. No. 61,704
Telephone: (512) 439-5094
Facsimile: (512) 439-5099